



The Harbinger

Newsletter of the
Illinois Native Plant Society

FALL 2014
Vol. 31, No. 3

"...dedicated to the preservation, conservation, and study of native plants and vegetation in Illinois."



© Christopher David Benda

The Shawnee National Forest is the only national forest in Illinois. It has two districts and there are 7 wilderness areas, including this one, the 3300-acre Garden of the Gods Wilderness Area. The 5.5 mile hike from Herod to the Garden of the Gods observation area is exquisite and provides many expansive views that are spectacular in the fall. Along this hike, one can scramble up to "H-Rock," a unique arch carved in the sandstone. Wherever you live in the great state of Illinois, make sure you visit the Garden of the Gods and the Shawnee National Forest as often as you can.

~Christopher David Benda, Editor

In this issue:

- President's message
- Chapter reports
- INPS Annual Meeting
- Carex Corner
- INPS Statewide Events

- H.R. 4790
- Book Reviews
- Neat Plant Videos
- 2015 Illinois Conservation Foundation Calendar
- Crossword Puzzle to Plant Terminology
- Invasive Species Corner



© Christopher David Benda

Governing Board

President:

Janine Catchpole

President-Elect:

Chris Benda

Past President:

Connie Cunningham

Secretary:

Rachel Goad

Treasurer:

Vicki Crosley

Erigenia Editor:

Andy West

Harbinger Editor:

Chris Benda

Membership:

Connie Cunningham

Webmaster:

Cassi Saari

At-Large Board

Bohdan Dziadyk

Tracy Evans

R.J. Fehl

Ron Kiser

Paul Marcum

Jason Zylka

Note: The 2014 issue of the *Erigenia* will be late. There is a lot for a new editor to organize and do to get an issue out. And we all do this as volunteers. Mohlenbrock's floral updates will be a feature in the issue.

Message from the President

Two years can certainly fly by and I am glad I had chance to serve the INPS as state president. There is an amazing learning curve that 2 years can hardly do justice to. I learned that our membership has a lot of talented people and a lot of passion for Illinois native plants and natural heritage. Like any group, the organization has a life of its own, and needs nurturing and dedication to keep it alive and vibrant. I think the organization, as a whole, is moving into a new cycle of development. Connie Cunningham led the way in getting our website and membership tracking improved. Our list serve, while not perfect, makes it is easier for the INPS board to communicate to members and for members to reach out to the collective knowledge base in our membership with questions related to native plants and restoration issues. I am excited to see what ideas Chris Benda will have for the INPS in his presidency. And of course, the INPS state board members are great people to work with. As the year enters the last quarter, the INPS may have a new chapter forming in the Bloomington/Normal area. There is also some talk in the Kankakee area about a chapter there. A meeting held on September 24, 2014, with an association of native plant and seed growers discussed with lots of good ideas to improve things for both growers and buyers of plant and seed and restoration services. We all know there is always work to do to educate public about value of native plants and our natural heritage.

And being willing to get involved is something I admire about the INPS and its members. Whether through formal chapter activities or in small groups or one person speaking to a garden club, every member can help fulfill the purposes of the INPS. Our members all have something they can do to help out. It can be as simple as using natives in home landscapes and educating neighbors or organizing a formal event with speakers in an auditorium. It can mean leading friends on a hike in a good natural area, botanizing along the way or participating in Citizen Science programs like Bud Burst or Monarch Watch. It can mean formal research and/or mentoring to students of native plants. While the INPS is not a lobbying organization, individuals can always be a voice promoting native plants in public and private spaces.

It has been an absolute pleasure to serve and, as past president and board member, INPS has not gotten rid of me yet!

~INPS President Janine Catchpole

Please consider renewing your membership as we approach the new year! (renewal form on last page)



Featured Blog: Jim Fowler Photography

Jim is unapologetically crazy about wild orchids and has been known to travel great distances just to see a single species in bloom. The intent of this blog/web site is to be a vehicle to share his adventures with you so that, hopefully, you might begin to appreciate why he is so fixated on wild orchids. <http://www.jfowlerphotography.com>.

INPS CHAPTER NEWS

NORTHEAST CHAPTER - Chicago

Diana Krug (President)

312-504-6473

northeast.inps@gmail.com

QUAD CITIES CHAPTER - Rock Island

Bo Dziadyk (President)

309-794-3436

qc_inps.home.mchsi.com

IRENE CULL CHAPTER - Peoria

Mary Hartley (President)

309-995-3356

haywool@winco.net

FOREST GLEN CHAPTER - Danville

Connie Cunningham (President)

217-516-1792

conniejcunningham@gmail.com

CENTRAL CHAPTER - Springfield

Annette Chinuge (President)

217-483-5893

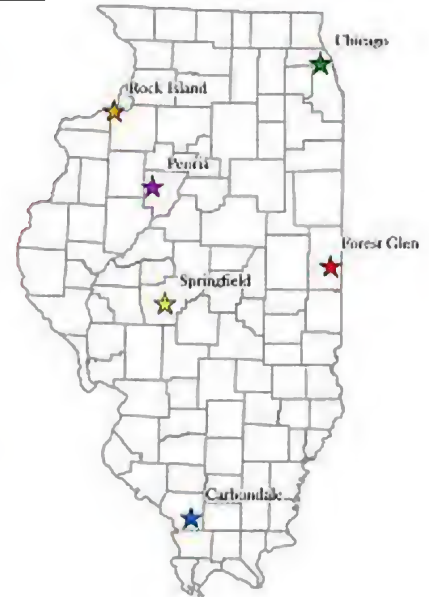
annette@avrosystems.com

SOUTHERN CHAPTER - Carbondale

Chris Benda (President)

217-417-4145

southernillinoisplants@gmail.com



For more information about events, please contact your chapter representative above.

Northeast Chapter (Chicago)

The Northeast Chapter will host monthly chapter meetings beginning in January, and will be soliciting members interested in leadership positions. Please consider joining us! The January INPS meeting will be on January 17 at the Chicago Botanic Garden's Plant Science Center. More details - time and directions - will be sent to members at a later date. Recently, the Northeast Chapter has partnered with the Illinois Nature Preserves Commission, the Illinois Department of Natural Resources, and a host of volunteers to steward Langham Island, home of the Illinois endemic Kankakee Mallow. Two workdays have resulted in significant progress in removing invasive species and creating space for native plants to flourish. Another workday is planned for November 16 at 10AM at Kankakee River State Park. Contact Northeast.INPS@gmail.com for more information.

Quad Cities Chapter (Rock Island)

No current news to report.

Irene Cull Chapter (Peoria)

No current news to report.

Forest Glen Chapter (Danville)

The Forest Glen Chapter will be having a pizza party on Tuesday, December 2, with a program beginning at 7pm. Speakers are Michael Jeffords and Susan Post presenting "Finding Nature in Illinois from Blooms to Butterflies". Two of the recent books, "Butterflies in Illinois" and their "Exploring Nature in Illinois," will be available for purchase and signing as well. The program will be held at the Kennekuk Environmental Education Center in the Kennekuk County Park west of Danville, IL.

Central Chapter (Springfield)

Central chapter members have enjoyed a variety of programs in recent months, including talks from chapter members on Tracy Evans and Guy Sternberg on the topics of restoration work and the Osage-orange, respectively. The chapter also welcomed guest speakers Al Grosboll ("Fracking in Illinois") and Janie Mandel ("America's Gardner: The Life of Jim Wilson"). Recent field trips included a summer visit to Tracy Evans' Sangamon County property to see prairie restoration progress and a fall trip to Creekside Outdoor Center, the environmental education facility of Lincoln College. We are looking forward to the annual holiday gathering and meal coming up on December 11. Registration information will be sent via the chapter listserv soon.

Southern Chapter (Carbondale)

The Southern Chapter has held many programs over the last few months. We heard from Bob Gillespie about Missouri natural areas, Tracy Boutelle-Fidler about woodland restoration at the Trail of Tears State Forest, Jesse Riechman about the use of fire as a management tool, and recently had a fall social picnic at Giant City State Park. This month we will hear from Julie Wittenborn-Sikorski about the native plant garden she helped create at Murphysboro Middle School and are working on details for a holiday dinner in December. We thank all our speakers and look forward to planning more awesome events in 2015!

We are also currently working on a new publication, "Guide to Summer Wildflower Hikes in Southern Illinois" and it should be available in early 2015. Additionally, the Southern Chapter received a Wildlife Preservation Fund grant for 3 workshops to be held next year. One will be a basic plant identification workshop, another will be a specialized sedge identification workshop, and the last will be a fern foray in the fall. For the fern foray, we are looking into lodging at Camp Ondessonk or a nearby state park and we plan to learn about ferns and how to ID them, as well as go out into the field and observe as many species native to our area as possible.

Also please visit our website for more information at www.ill-inps.org!

Welcome New Illinois Native Plant Society Members!

At-Large

Angelo Capparella

Central

Lenore Gerdow

Randy Smith

Forest Glen

Christine Cline

Mary Colleran

Dan Foote

Chris Johns

Jean Mengelkoch

Morgan Walder

Irene Cull

Roger Anderson

Jason Haupt

Michael Savoie

Northeast

Cathy Becker

Larry Boehlke

Larry Brammer

Kathy Bruch

Finley Campbell

Ryan Campbell

Michelle Carbonara

Suzanne Coleman

Lisa Culp

Julia and Nine Denne

Carolyn Faber

Raquel Garcia-Alvarez

Kathleen Garness

Karen Gerrett

Dale Gibson

Christopher Hanley

Peter Kim

Kindy Kruller

Greg LaPlante

Pat McTee

Scott Mohan

Lonnie Morris

Sheldon Nicol

Brenda Occhiuzzo

Joe Occhiuzzo

Stephen Packard

William Plummer

Kathy Sharpe

Raymond Stadt

Anne Stake

Scott Stecker

Kevin Stermer

Sarah Styler

Margaret Tobin

Quad Cities

Amy Loving

Southern

Erick Baumberger

Ruth Hoak

Rob Stroh

Kristen Trimble



2014 Illinois Native Plant Society Annual Meeting in Manteno, Illinois!

The Northeast Chapter hosted the Annual Meeting at Camp Shaw Waw Nas See in Manteno, Illinois on August 1-3. Over 100 attendees enjoyed the rustic camp atmosphere, with many camping and staying in cabins on site. On Friday night noted Geologist Raymond Wiggers spoke to us about the geological and natural history of the Kankakee Sands region. On Saturday, attendees enjoyed field trips that highlighted the natural diversity of the surrounding areas (please see the trip reports on next page). Some members learned about ferns, other canoed the Kankakee River in search of the rare endemic Kankakee Mallow, and others investigated the diversity of the sand dunes common in this region. Saturday evening's auction was full of great items that members bid on while enjoying, "Everglades of the North", a documentary about the Grand Kankakee Marsh, presented by Marianne Hahn. After the program, good conservation with good beverages commenced and wonderful campfire with s'mores and guitar music followed. Additional field trips on Sunday rounded out a great weekend. To everyone who came, thank you for joining us! You can view photos of the weekend at <https://www.facebook.com/media/set/?set=a.847336265277910.1073741846.128013787210165&type=3> <http://www.ill-inps.org/index.php/events/annual-meeting>.



Field Trip Reports for the 2014 Illinois Native Plant Society Annual Meeting

By Floyd Catchpole: Braidwood Dunes put on a beautiful show of fern species and many varied habitats, from sand prairies to woodlands, marshes and button bush swamp. A most unusual looking orchid growing well over two feet tall was identified by our very own expert, Kathleen Garness, as *Platanthera lacera*. While known from Braidwood, we were initially baffled by this tall, robust specimen, resulting from an exceptionally wet year.

By Chris Benda: Saturday's canoe trip down the Kankakee River began with lots of excitement and expectation, but unfortunately most were disappointed over the outcome. Langham Island, home to the endemic Kankakee Mallow (*Iliamna remota*), has seen neglect in recent years and the island was invaded by exotic shrubs. No plants of Kankakee Mallow were observed. However, a Friends of Langham Island group has been formed and two workdays have already been held. Another workday is scheduled (see information on page 8) and you can read more about the recovery efforts at this blog by Stephen Packard, <http://woodsandprairie.blogspot.com/2014/10/myth-or-miracle-unexpected-news-of.html>.

By Eric Ulaszek: The fern identification workshop began with a brief classroom session on fern identification. The remainder of the day was spent in the field, first at Braidwood Dunes and Savanna Nature Preserve, then at Rock Creek Canyon behind Camp Shaw-Waw-Nas-See. Fifteen different ferns were seen in habitat by participants; only the diminutive adder's-tongue at Braidwood escaped our sharp eyes!

By David Dolak: On Sunday, David Dolak, Geology Faculty from Columbia College Chicago, led a fossil hunt with the INPS at the Mazonia/Braidwood State Fish and Wildlife area.. This is the site of the former Pit 11 strip mine of the Peabody Coal company, and is famous worldwide for its fine preservation of fossils from the Carboniferous Period of the Paleozoic Era, approximately 300 million years ago. During the two-hour fossil hunt, INPS members collected a variety of fossils from the ancient swamp including fossil ferns, horsetail fronds, jellyfish, and samples of Illinois coal. Mr. Dolak also explained the geological story of the site and provided interpretive handout materials and donated specimens.

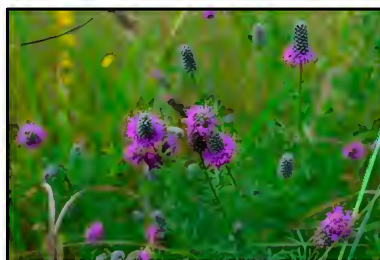
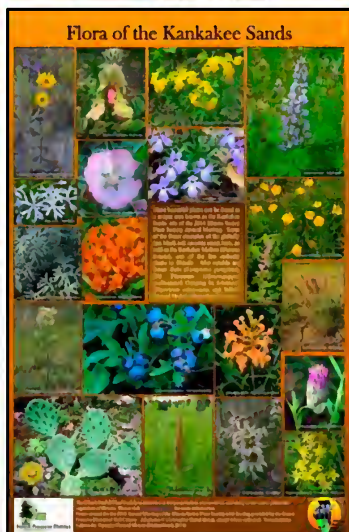
By Jason Zylka: The field trip to Sand Ridge Savanna Nature Preserve saw a variety of different habitat types and ongoing management practices. Mesic and dry mesic sand prairies were on display as well as sand savanna and shrub prairie. The group discussed the management challenges at such a diverse site and some of the hard decisions that go into managing a site for the good of the entire system.

By Chris Benda: Sunday's field trip to the Momence Wetlands provided a great opportunity to share with members some interesting plants. We observed Swamp Cottonwood (*Populus heterophylla*) and American Snowbell Bush (*Styrax americana*), both species more common in the swamps in the southern part of the state.

By Rachel Goad: For Sunday's bioblitz, members enjoyed a leisurely exploration of Camp Shaw. This trip was primarily self-led, with significant help from Eric Ulaszek, new member Adrienne Basey, and secretary Rachel Goad. A master list is being compiled from the trip, and members discussed organizing a more comprehensive Bioblitz in the future. Stay tuned! You can view more photos from the 2014 Annual Meeting at this link:

<https://www.facebook.com/media/set/?set=a.847336265277910.1073741846.128013787210165&type=3><http://www.ill-inps.org/index.php/events/annual-meeting>. Thanks

to all who contributed photos.



Carex Corner: The Dreaded Ovales

By Linda W. Curtis lcurtisbotanist@ameritech.com

The Ovales (oh-VAHL-lees) are a section of genus *Carex* with wand-like heads of small spikes or spikelets in rows or clusters. Their identification creates more angst than any other group of *Carex*. One of the problems is some species have a different form of seed head after the first culms mature with a switcher-roo to a different shape later in the summer. The Flora of North America Volume 23: Cyperaceae: reveals "Those late-season forms are not accounted for in the key or descriptions, and plants collected late in the season lacking intact spring inflorescences may be impossible to key. "

Notice "may be" which gives some lee-way to those smart enough to mark a plant in the field and then return to it a month or two later. Or, a botanist like myself that relies on growing *Carex* in pots on the patio so I can watch the changes for my "ah-hah!" moments.

The Ovales can make you crazy. Many people give up or leave it to the experts known as Caricologists. The late Jim Zimmerman of UW-Madison wrote in Fassette's Spring Flora of Wisconsin p 34, " The perigynia and spikelets change rapidly after flowering, causing the same species at 2 stages of development to look less alike than 2 different species at the same stage".

The petalless flowers of *Carex* have perigynia, sac-like envelopes, each with a single seed-like achene. Groups of sacs form spikes or small spikelets at the seed head. Most seed heads are simple but some are compound with side branches. The Ovales are distinguished by flat sacs with tissue-thin wings that usually reach from the tip of the beak to the base of the sac. A few species like *C. cristatella*, have narrowed wings that end partway down the sac. Magnification is necessary.

Sometimes the achene inside the sac makes a conspicuous bump that is overlain with support lines known as nerves. The number and width of the nerves can be quite diagnostic for identification, and like forensic botany, gives a usable fingerprint pattern.

While many *Carex* species can be identified by their sac "fingerprint", the Ovales are tricky beasts that vary in having raised nerves on both sides of the flat sacs, or one side only or none at all, some referred to as obscurely nerved. (an arg moment). The point is the descriptions of *Carex* species give ranges of variable traits and the Ovales are the winners in the "stump the botanists" category. The terms "sometimes, often, and usually" apply to traits of the Ovales.

Dr. Mohlenbrock mentions in *Flora of Illinois: Sedges: Carex* that *C. molesta* is one of the most common sedges in Illinois. Yet ask any roomful of botanists if anyone has seen one lately, you could expect a lot of blank stares. It is one of the easier ones to spot since its seed heads overtop their clump of grass-like leaves with a wiry culm tipped with usually three ball-shaped spikes. If there were more Ovales with orbicular spikes like *C. molesta*, instead of the more common oval spikes, the group might have been named Orbales. (groan)

Puzzlers are those with distinct seed head shape which have the sacs that may or may not match the images in manuals. Botanists must consult several manuals and websites, and they do not always agree. Do we really expect the keys in a manual for Michigan plants to be similar to one for Illinois? Populations vary by locations.

The keys in lab manuals assume you are in a lab and can magnify the sacs to see the details, after all most are about size of a sesame seed and are measured in millimeters. Some keys, such as the one on p 339 in Flora of North America: Volume 23 require a microscope that can magnify 30–40 times, and that's medium to high power on a dissecting scope. A hand lens will not do the job.

Continued on page 7.

Carex Corner: The Dreaded Ovals continued

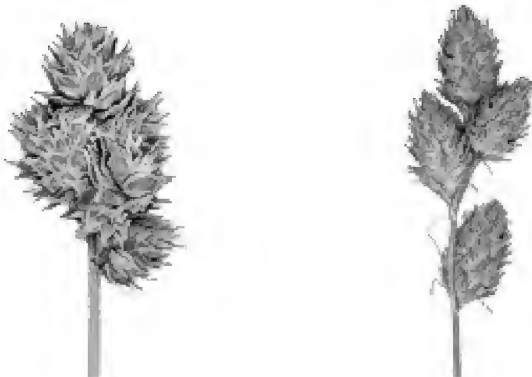
By Linda W. Curtis lcurtisbotanist@ameritech.com

Why the need for such detail? Some species have tiny bumps called papillae on the leaves, yet some variable species such as *C. festuacea* may or may not be papillose. Minute traits are helpful, yet there are other ways to distinguish the species. The best leads in the key are the numbered list of choices that lead to the correct species.

The range of sac sizes reveals different positions in the spikes in the seed head but the sacs grow larger as they mature, and the species do not mature at the same time. Some continue to increase size well into summer, so a June specimen could be misleading and appear different in August. Dry sacs develop better fingerprint-like lines or ridges called nerves when the tissue between the support nerves wilts, so they appear raised.

The growing achene in the sac also becomes more pronounced in shape outline. (I foresee in the future forensic botanists will use a perigynia scanner like an optic nerve scanner that will determine species). The sac length in millimeters is not enough of a clue and the sac width often determines the species, along with nerves present. *C. brevior* is nerveless on its inner face while similar *C. molesta* is faintly nerved.

The one millimeter difference between *C. festuacea* and *C. brevior*'s sac length is diagnostic. *C. festuacea* sacs are less than 4 mm long, while *C. brevior*'s are 4 mm or longer. (Squinting exercises the eye muscles and may be good for you). Guess where most of the sacs will measure of the species you collect? That's why botanists meticulously pick apart the spikes of *Carex*. If a sac falls easily off the spike, consider it too good to be true. It's likely a dud and does not fit the sac shape or size given keys.



L-R: *Carex molesta* with clustered seed head and *C. brevior* with spaced overlapping



L-R: Ovate perigynium of *C. molesta* and *C. brevior*, broadly ovate.

Other clues are whether the sacs are widest at the middle, below, or above the middle. *C. brevior*, *C. festuacea* and *C. molesta* sacs are widest below the middle, most of the time. Others have sacs less than 2 mm wide, and for *C. festuacea*, that's most of the time. That means it will key under two key leads: either "sacs greater than 2 mm wide" and again in "sacs less than 2 mm wide". "Clear and discernable traits" does not apply to many *Carex* unless key-makers "bridge the gaps" and include highly variable species in more than one key.

But that's why people who solve Sudoku Rubik's cubes naturally migrate to identifying *Carex*. It's the challenge and like other games, each section of *Carex* has their own level of identification difficulty. I do not recommend Ovals for beginners.

Linda Curtis's humorous pseudonym Lindaeus, offers empathy for Linnaeus who first grouped the new worlds Carices. Lindaeus says, "The range of two similar species sac sizes will be the overlap size on any species you try to identify in the field." Linda Curtis is author of *Woodland Carex of the Upper Midwest*. www.curtistothethird.com



Select INPS Statewide Events



On November 13, Michael Jeffords and Susan Post will present a program about their recent publication "Butterflies of Illinois: A Field Guide." at 6:45pm at Adams Wildlife Sanctuary in Springfield, Illinois. The authors will share their passion for and knowledge of our native butterflies. They will share stunning photos and information on our native Lepidopterans. The book, which will be available for sale, contains descriptions, field photos, and life-size specimen photos of all Illinois' butterfly species. It also includes easy-to-use identification quick guides depicting the tops and undersides of all butterfly species, background information and photos on butterfly life cycles, habitats, and ecology, Illinois range maps and adult flight periods, descriptions of species that only rarely are seen in Illinois or that reside in adjacent states that could occur in Illinois, and much more!

BUTTERFLIES of ILLINOIS

contains descriptions, field photos, and life-size specimen photos of all Illinois' butterfly species. It also includes:

- easy-to-use identification quick guides depicting the tops and undersides of all butterfly species,
- background information and photos on butterfly life cycles, habitats, and ecology,
- Illinois range maps and adult flight periods,
- key characteristics relevant to field identification,
- descriptions of species that only rarely are seen in Illinois or that reside in adjacent states that could occur in Illinois,
- and supplemental information on various species (collection records, rare sightings, and other information that may be of interest to the butterfly enthusiast).



MICHAEL R. JEFFORDS is a retired entomologist with the Illinois Natural History Survey, Prairie Research Institute, University of Illinois. He has been studying and photographing the Illinois landscape for 40+ years.

SUSAN L. POST is a retired field biologist with the Illinois Natural History Survey. She has been studying, photographing, and writing about the Illinois landscape and its organisms for 30+ years.

JAMES R. WIKER is a research associate of the Illinois State Museum and an affiliate of the Illinois Natural History Survey. He is the recognized authority on the identification and distribution of Illinois Macrolepidoptera and has been studying them for 45+ years.

The Northeast Chapter and the recently formed Friends of Langham Island will be conducting another targeted workday on November 16th from 10am-3pm to save the Kankakee Mallow and other species on Langham Island. We will continue to clear brush in areas where the Kankakee Mallow population was last documented. We are making great progress thanks to the investment people have made from all around the Chicago Wilderness region. Lets keep the momentum rolling. We will be heading to the Island by 10am. People will be there earlier to greet you. Things to bring: Brushcutting tools (chainsaws (PPE), brushcutters (PPE), loppers, handsaws), chemical gloves and brushes/containers for herbicide, canoes or waders, lunch/snacks and water. We will need some people cutting, others applying herbicide (will need Illinois license), and others tending to the fires. Contact Info: Trevor at trevoredmonson@gmail.com or 309-351-8813. Parking is at the Kankakee River State Park, 41.190152, -87.964227 (Parking Lot)



Emerald Ash Borer Community Preparedness Planning Workshop

When: Thursday, November 13, 2014 Time: 8:30 a.m.-12:00 p.m.
Where: Crab Orchard Wildlife Refuge, Route 148, Marion, IL

When: Thursday November 13, 2014 Time: 1:30 p.m. to 4:30 p.m.
Where: Perry County Government Bldg., 3764 Route 127, Pinckneyville

When: Friday, November 14, 2014 Time: 8:30 a.m.-12:00 p.m.
Where: Shawnee National Forest, 50 Highway 145 South, Harrisburg, IL

Recent discoveries of Emerald Ash Borer in Perry and Williamson counties underscore the need for communities to be proactive against Emerald Ash Borer (EAB).

University of Illinois Extension is offering a program for local officials, municipalities, park districts, arborists, and others impacted by the recent Emerald Ash Borer findings.

Workshop participants will learn how to create a community action plan to manage ash trees on city-owned and private property. This workshop will discuss how to take inventory of all

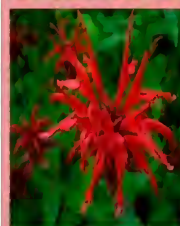
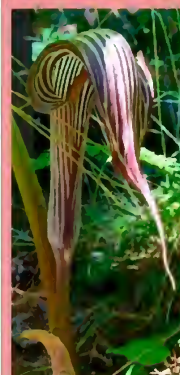
David Robson with University of Illinois Extension will give an update on Emerald Ash Borer in Illinois; Scott Schirmer with the Illinois Department of Agriculture's Bureau of Environmental Programs will discuss EAB regulations and community action planning; Jennifer Behnken Urban and Community Forester Coordinator will discuss tree surveys, as well as tree care and removal.

Registration required by November 12, 2014

There is no fee to attend, but reservations are required. To register call University of Illinois Extension, Jackson county at: 618-687-1727 or register online at <http://web.extension.illinois.edu/fjprw/>



Emerald Ash Borer Damage



SAVE THE DATE

MARCH 20-22, 2015

ILLINOIS INDIGENOUS PLANTS SYMPOSIUM

John A Logan Center for BUSINESS & INDUSTRY, CARTERVILLE

DISCOVER SOUTHERN ILLINOIS NATURAL AREAS AND THEIR RARE SPECIES

KEYNOTE SPEAKER:
JOHN SCHWEGMAN

MORE INFORMATION
JANUARY 30, 2015

PHONE: 618 . 687 . 1727
<http://web.extension.illinois.edu/fjprw/>

Exploring Nature in Illinois

A Field Guide to the Prairie State

A lavishly illustrated guide to fifty of Illinois's most beautiful wildlife havens

Loaded with full color photographs and evocative descriptions, *Exploring Nature in Illinois* provides a panorama of the state's overlooked natural diversity. Naturalists Michael Jeffords and Susan Post explore fifty preserves, forests, restoration areas, and parks, bringing an expert view to wildlife and landscapes and looking beyond the obvious to uncover the unexpected beauty of Illinois's prairies, lakesides, river bottoms, and woodlands.

From the colorful variety of birds at War Bluff Valley Audubon Sanctuary to the exposed bedrock and cliff faces of Apple River Canyon, *Exploring Nature in Illinois* will inspire readers to explore wonders hidden from urban sprawl and cultivated farmland. Maps and descriptions help travelers access even hard-to-find sites while a wealth of detail and photography offers nature-lovers insights into the flora, fauna, and other aspects of vibrant settings and ecosystems. The authors also include diary entries describing their own impressions of and engagement with the sites.

A unique and much-needed reference, *Exploring Nature in Illinois* will entertain and enlighten hikers, cyclers, students and scouts, morning walkers, weekend drivers, and anyone else seeking to get back to nature in the Prairie State.

"These authors prove in no uncertain terms there is much to explore out-of-doors in Lincoln-land."--*Booklist*

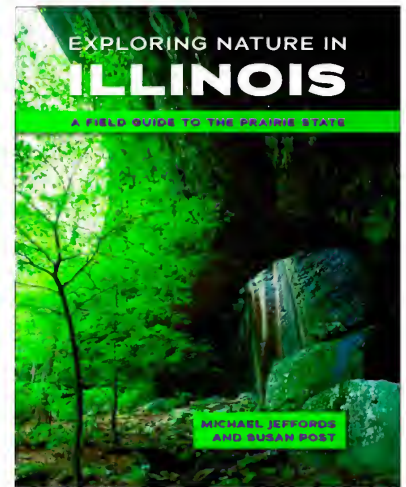
"Authors Michael Jeffords and Susan Post do an excellent job of ferreting out the best natural spots in the state. . . . Their passion and love of Illinois comes through in their descriptive and lyrical prose."--*Chicago Book Review*

"The goal is simple for Michael Jeffords and Susan Post: 'We feel these special places and events should not be missed by any Illinois citizen with an interest in nature and wild things.' As a fellow traveler in and appreciator of Illinois' wild places, I truly value the same love that Jeffords and Post show for their native state, and the expertise they bring to the book as biologists (entomologists) makes all our journeys through Illinois's remaining places richer."--Dale Bowman, outdoors columnist, *Chicago Sun-Times*

"The reader is transported into the vivid, multisensory landscape of Illinois' most beloved natural areas. History and biology intertwine on a narrative pathway unabashedly intended to inspire travel. The authors remind us there is still much beautiful wildness to love and protect in Illinois."--Stacy James, Prairie Rivers Network

"Very well done! *Exploring Nature in Illinois* is an enjoyable read providing vivid descriptions of Illinois's special natural places. . . . [Jeffords and Post] know these areas well [and] highlight the history, natural character and resource management--all of which helps the reader develop a better understanding of each place. . . . I look forward to taking their challenge and venturing out throughout the state to listen, look, hike, photograph, paddle and explore Illinois's wild places."--Elizabeth Jones, Assistant Manager, Cypress Creek National Wildlife Refuge

Michael Jeffords is the retired education/outreach director for the Illinois Natural History Survey (INHS) and was staff photographer for *The Illinois Steward* magazine. **Susan Post** is a retired INHS research scientist and staff writer for *The Illinois Steward* magazine, and author of *Hiking Illinois*. They are co-authors of *Illinois Wilds*.



Illinois legislature considering H.R. 4790, a bill to encourage and facilitate efforts by States and other transportation rights-of-way managers to adopt integrated vegetation management practices.

“(1) conduct or encourage integrated vegetation management practices on roadsides and other transportation rights-of-way, including reduced mowing; (2) enhance the development of habitat and forage for Monarch butterflies, other native pollinators, and honey bees through plantings of native forbs and grasses, including noninvasive, native milkweed species that can serve as migratory way stations for the endangered Monarch butterfly and to facilitate migrations of other pollinators. (3) encourage leveraging through partnerships and coordination with stakeholders in support of pollinators and plantings of native forbs and grasses, such as environmental groups, research institutions, other agencies, businesses, and community organizations; and (4) conduct or facilitate research and demonstration projects on the economic and environmental benefits and best practices for integrated vegetation management, reduced mowing, and plantings of native forbs and grasses for pollinator habitat, forage, and migratory way stations for Monarch butterflies and other migrating pollinators.” View the full bill <https://www.congress.gov/bill/113th-congress/house-bill/4790/text>



**Flowering Plants:
Asteraceae, Part 1
1st Edition**
Robert H. Mohlenbrock
\$65.00

Expected Availability
4/2/2015

Thirty-five Legislators Are Recognized for Their Votes on the 2014 Environmental Scorecard

The Illinois Environmental Council released its 2014 Environmental Scorecard on Monday, August 22, 2014. 35 legislators were honored for their voting records. View a copy of the 2014 scorecard here.

<https://drive.google.com/file/d/0B6rkWBzDJOLFMjd3cHFNSzZvLW5SNDU0ckJDdUtXanhmdjE0/edit>

Field Guide to Wisconsin Grasses

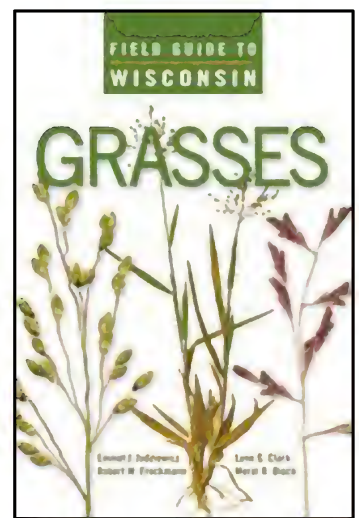
Emmet J. Judziewicz, Robert W. Freckmann, Lynn G. Clark, and Merel R. Black

"This is a beautifully illustrated book that offers a fully up-to-date treatment of the grasses in a modern systematic framework. It is concise yet thorough and quite readable. I wish this book were available when I was learning grasses!"

—Anton Reznicek, University of Michigan

Grasses are the foremost plant family of prairies, savannas, barrens, many agricultural landscapes, lawns, and successional habitats throughout Wisconsin, yet they are notoriously difficult to identify. This field guide to 232 species of Wisconsin grasses includes more than 1,100 illus.. Setting a new standard as the first new, illustrated midwestern grass identification manual to appear since the 1960s, it provides up-to-date, comprehensive information for naturalists, gardeners, landscapers, nursery horticulturalists, community restoration professionals, agronomists and biologists, and any outdoors lover.

The book includes species descriptions and distribution maps for all 232 species, more than 700 color photographs accompanying species descriptions, drawings of most species, chapters on grass morphology and grasses in natural communities, keys to all species, including an illustrated key to genera, and a glossary of grass terminology.



Save the Date for Wild Things!

*A Chicago Wilderness Conference
for People and Nature*

Saturday, January 31, 2015
University of Illinois in Chicago

Stay tuned for registration details in November!

Keynote speaker Bill Kleiman, Steward of
Nachusa Grasslands, will discuss:

How the Bison Came Back

*Stewards and scientists restore human and
natural communities at Nachusa Grasslands*



To be involved in planning, contact
chicagowildthings@yahoo.com

Illinois Department of Natural Resources has published video postcards to promote the wonderful places IDNR is charged with protecting every day. Below you will find links to three videos that capture our state parks.

Southern Illinois Time-Lapse Postcard: <https://www.youtube.com/watch?v=fIMf8lcHQdI>

Northwest Illinois Time-Lapse Postcard: <https://www.youtube.com/watch?v=hdKMcExnF88>

Northeast Illinois Time-Lapse Postcard: https://www.youtube.com/watch?v=WCqVNC-3_s0



Go Orchids: A Guide to Identifying Orchids

North America is home to over 200 orchid species, and more than half are endangered or threatened somewhere in their native range. The North American Orchid Conservation Center (NAOCC) was established by the Smithsonian Institution and the United States Botanic Garden to assure the survival of all native orchids in the U.S. and Canada.

NAOCC activities will focus on establishing collections of seeds and orchid mycorrhizal fungi, developing protocols to propagate and restore all native orchid species and developing an interactive website to provide the public with a mechanism to identify and learn everything that is known about our native orchids. This website will be an ever-changing window into NAOCC. Start your journey by viewing the videos on this page. <http://northamericanorchidcenter.org/>



What Plants Talk About

They don't have eyes or ears, but they can find their own food. They lack a brain but some scientists think that they can communicate, cooperative, and even wage war. Perhaps plants lead anything but solitary, sedentary lives. But not everyone believes there is a social side to plants. From nurturing their young to eavesdropping on their neighbors it seems plants are doing and saying quite a bit. We just need to listen. What Plants Talk About:

http://video.pbs.org/video/2338524490/?utm_source=Facebook&utm_medium=NatureOfficial&utm_campaign=WhatPlantsTalkAbout



Time-lapse video of the most sought after orchid in the world, the ghost orchid, (*Dendrophylax lindenii*), found in the swamps of south Florida.

<https://www.youtube.com/watch?v=1wMhBoRfdXA&feature=youtu.be>



Illinois Conservation Foundation Releases Second Annual Wall Calendar

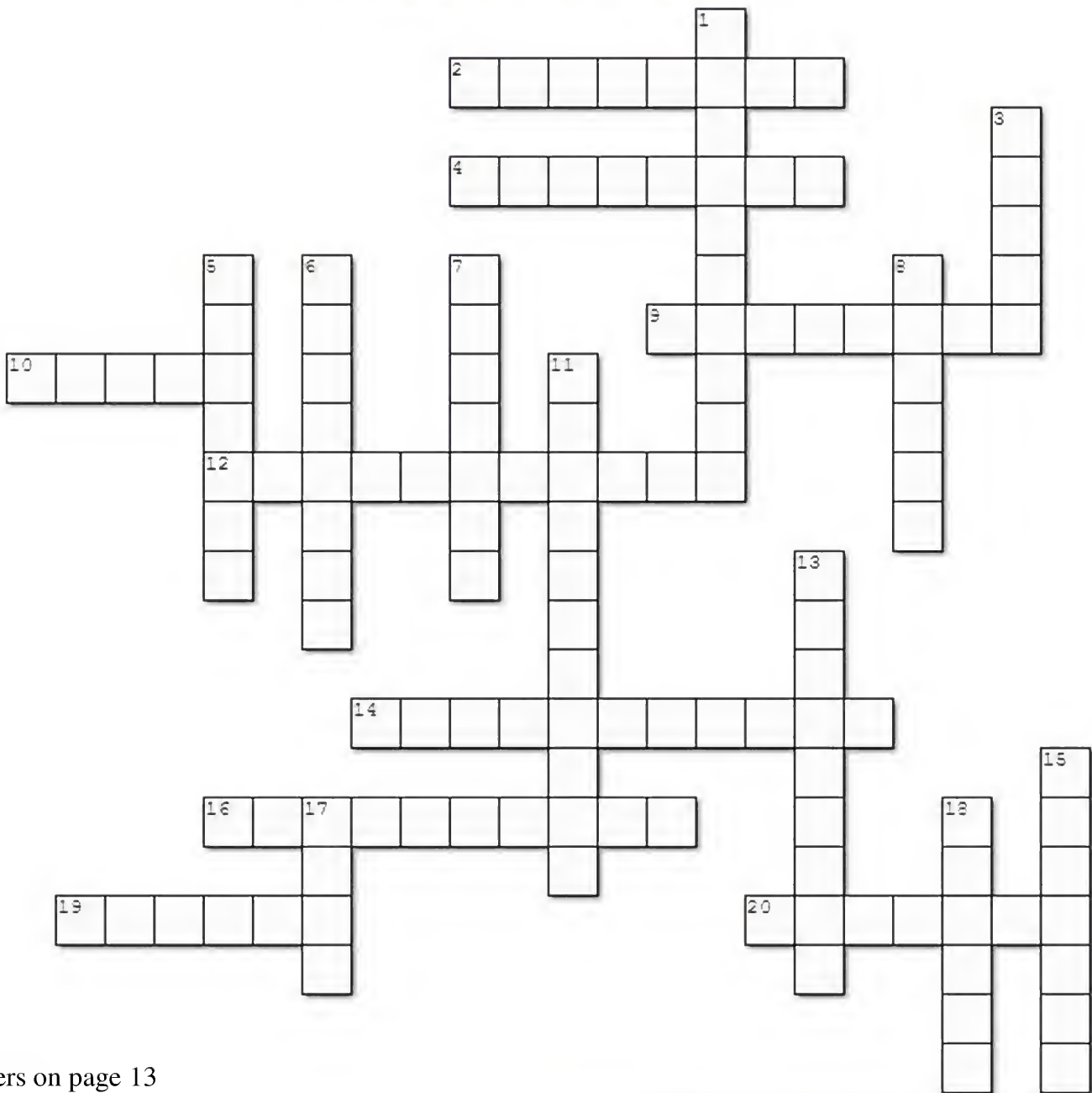
SPRINGFIELD, IL - The Illinois Conservation Foundation is pleased to announce the release of its second-annual Illinois wall calendar. "Our 2014 wall calendar was a tremendous hit, not only with those who enjoy being outdoors in Illinois, but those who recognize the importance of teaching the youth of Illinois about wise use and management of our natural resources," said Eric Schmidt, Illinois Conservation Foundation Executive Director. Proceeds from the sale of this calendar will support youth conservation education programs in Illinois.

The 9-inch x 12-inch calendar contains stunning photography of Illinois and can be purchased for \$12, with discounts available for multiple copies. MasterCard or VISA orders can be placed at the secure Illinois Conservation Foundation website www.ilcf.org or by phone at 217-785-2003. Checks and money orders can be mailed to Illinois Conservation Foundation, ATTN: Wall Calendar, One Natural Resources Way, Springfield, IL 62702-1271.



ICF is a multi-faceted 501(c) (3) organization working since 1994 on projects to preserve, protect and manage Illinois' natural resources.

Complete the crossword below



Answers on page 13

Created on TheTeachersCorner.net Crossword Maker

Across

- 2. covered in scales
- 4. whitish coating
- 9. monarch host plant
- 10. oak fruit
- 12. plant pigments
- 14. dominant plants on earth today
- 16. naked seed
- 19. the stem of a leaf or inflorescence
- 20. the only genus in Illinois that starts with the letter 'Q'

Down

- 1. plants with both male and female flowers
- 3. fern leaf
- 5. plants with one cotyledon
- 6. smooth
- 7. Aesculus fruit
- 8. pine tree leaf
- 11. intricate ice ribbons
- 13. flat seeds that stick to your clothes
- 15. long stiff hairs
- 17. algae and fungus
- 18. tropical epiphyte

Invasive Species Corner

Please look at the following resources for the latest in Invasive Species news.



Emerald Ash Borer continues to spread across the state. The Illinois Department of Agriculture recently sent out a press release about finds in new counties. Those counties include Logan, Menard, Perry, Sangamon and Williamson. See press release at the link below.

<http://illinoisiam.blogspot.com/2014/10/idoa-monitoring-traps-detect-emerald.html>

Recent research indicates that Japanese stiltgrass invasion is causing shifts in the community that leads to drastic increases in predation of young toads by wolf spiders.

More details and discussion at <http://illinoisiam.blogspot.com/2014/08/is-stiltgrass-killing-our-toads-yes-but.html>

WGNTV has a nice article about the partnership between the Illinois Department of Natural Resources and commercial fishermen to remove Asian Carp from the Illinois River.

Read the full story and watch a video here:

<http://wgntv.com/2014/07/21/asian-carp-vs-commercial-fishermen/>

Thousand Cankers Disease (TCD) was recently discovered in Brown County, Indiana. Thousand Cankers Disease is a serious threat to Black Walnuts throughout the Eastern United States, including Illinois. This disease is native to southwestern United States, where it is a minor pest on the native western walnuts, but it is deadly to the Black Walnut, native to the Eastern United States...

Continue reading article at: <http://illinoisiam.blogspot.com/2014/06/thousand-canker-disease-tcd-deadly-to.html>

We are continuing the phenology series on the Illinois ISAM Blog. From time to time, we will be reporting on the development of invasive plants across Illinois, informing readers about what is in bloom, leafing out, setting seed, or senescing in different regions of the state. <http://illinoisiam.blogspot.com/2014/06/phenology-report-for-june-16-2014.html>

Recordings of the presentations from the 2014 Illinois Invasive Species Symposium are now available online at:

<http://www.invasive.org/illinois/SymposiumRecordings.html>

The Illinois Wildlife Action Plan's Invasive Species Campaign sponsored the 2014 Illinois Invasive Species Symposium. This event was a one-day, all-taxa symposium that featured a great lineup of speakers presenting on invasive plants, diseases, insects, and animals. The symposium also included a ceremony for this year's Invasive Species Awareness Month Awards.

The meeting was held at the IDNR Office Building in Springfield on May 29th. Over 90 people attended the meeting in person with an additional 20+ attending via live webcast.

In February of 2013 the Northwest Illinois Strike Team (NWST) began controlling and monitoring of invasive plant species in State designated nature preserves, natural areas, and lands adjacent to natural areas in six northwest Illinois counties. Thus far, they have treated over 650 acres of invasive plants in natural areas.

<http://illinoisiam.blogspot.com/2014/03/forest-health-programs-of-us-forest.html>

The Illinois Invasive Species Awareness Month Committee would like to recognize recipients in five categories: Professional of the Year, Volunteer of the Year, Professional Organization of the Year, Business of the Year, and Educator of the Year. Recipients of the 2014 ISAM awards were officially recognized at an awards ceremony in Springfield at the Illinois Department of Natural Resources (IDNR) office...

Continue reading at <http://illinoisiam.blogspot.com/2014/06/awards-given-out-for-outstanding.html>

Answers to Crossword Puzzle from page 12

Across: 2. lepidote, 4. glaucous, 9. milkweed, 10. acorn, 12. carotenoids, 14. angiosperms, 16. gymnosperm, 19. rachis, 20. Quercus

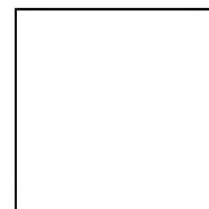
Down: 1. monoecious, 3. frond, 5. monocot, 6. glabrous, 7. buckeye, 8. needle, 11. frostflower, 13. Desmodium, 15. hirsute, 17. moss, 18. orchid

ILLINOIS NATIVE PLANT SOCIETY

Forest Glen Preserve
20301 E. 900 North Road
Westville, IL 61883

illinoisplants@gmail.com

www.ill-inps.org



Dodecatheon frenchii –
French's Shooting Star

2014 Fall Harbinger – November 2014

Please consider renewing your membership as we approach the new year!
You can renew/join by filling out the form below or online at our website,
<http://www.ill-inps.org/index.php/membership/online-membership-form>

Please become a member and support this local non-profit organization dedicated to the preservation, conservation, and study of the native plants and vegetation of Illinois!!!



Join us!

- ☐ New member
- ☐ Renewal
- ☐ Address Change only

Mr./Mrs./Ms./Miss/Dr. _____
Street _____
City _____ State _____ Zip _____
Phone Number _____ Membership Year _____
Email _____

☐ Check here if you *need* to receive newsletters by postal mail*

Membership Categories

- ☐ Student.....\$13.00
- ☐ Individual.....\$20.00
- ☐ Family (new category).....\$30.00
- ☐ Institutional (nonvoting).\$20.00
- ☐ Supporting.....\$30.00
- ☐ Patron.....\$55.00
- ☐ Life.....\$300.00

Chapter Affiliation

- ☐ Central (Springfield)
- ☐ Forest Glen (Westville)
- ☐ Northeast (Chicago)
- ☐ Southern (Carbondale)
- ☐ Quad City (Rock Island)
- ☐ Irene Cull (Peoria)

PLEASE MAKE CHECKS PAYABLE TO:
ILLINOIS NATIVE PLANT SOCIETY
Forest Glen Preserve
20301 E. 900 North Road
Westville, IL 61883



GO GREEN! If you are receiving a black and white newsletter by postal mail, please help us lower our costs by signing up for an electronic copy in color. Please send your email address to illinoisplants@gmail.com to be added to our email distribution list. Please "like" us on facebook at www.facebook.com/illinoisplants.